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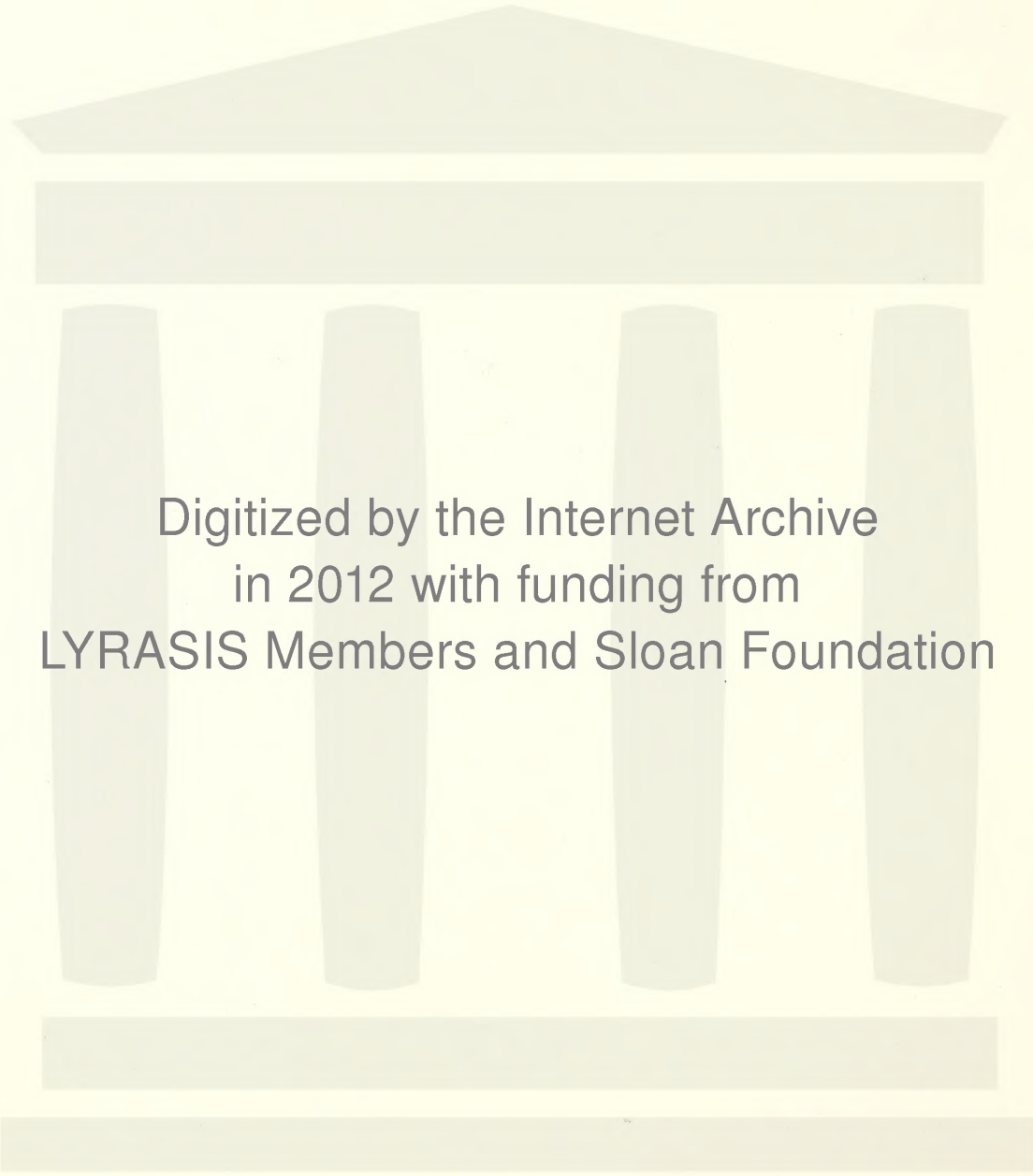
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# ***Biennial Report***

***1986-1988***





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North Carolina  
Department  
of  
Transportation

# **Biennial Report**

for the  
biennium  
1986-1988  
January 1989

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Governor

James E. Harrington  
Secretary

Thomas J. Harrelson, Jr.  
Deputy Secretary

S. Thomas Rhodes  
Deputy Secretary

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## To the Members of the General Assembly and the Citizens of North Carolina



This report outlines the activities of the North Carolina Department of Transportation during the biennium that began July 1, 1986, and ended June 30, 1988 (Fiscal Years 1986-88).

During this period, North Carolina's transportation system has been challenged by unprecedented demands that have outstripped our revenue base. More motorists than ever travel more frequently and farther on our highways. Despite that, and because of it, our other transportation programs, such as our public transportation, rail and aviation programs, have become increasingly important as we try to meet the total transportation needs of our citizens.

We have responded to our revenue challenges by making every effort to stretch our scarce dollars and by formulating a Transportation Improvement Program that has reached the unprecedented level of delivering on 94 percent of its projects as scheduled.

Much, however, remains to be done. Our highway construction backlog exceeds \$12 billion, and new revenue sources must be found in order to gear up construction to a level to meet our needs. Actions by the North Carolina General Assembly and the United States Congress will continue to play a major role in the progress we make toward answering these challenges.

I look forward to facing these challenges with you, and to working as a team for the betterment of our state and our transportation network. We will continue to provide a dependable program, to promise only what we can deliver, as we strive to maintain and improve the transportation system that the citizens of North Carolina require and deserve.

A handwritten signature in dark ink, appearing to read "J. Harrington". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

# HIGHLIGHTS 1986-1988

- 94 percent of all interstate, rural, urban and bridge projects were delivered as scheduled in the 1988-1996 Transportation Improvement Program.
- In 1987, a Strategic Highway Network for North Carolina was identified by the Board of Transportation.
- In 1987, the enforcement section of the Division of Motor Vehicles had 11,625 stolen vehicles recovered or cleared for a recovery rate of 79 percent -- 17 percent above the national average.
- DMV's Fatal Accident Reporting System was rated best in the nation by the National Highway Traffic Safety Administration.
- In 1987, North Carolina received the National Safety Council's top award for having a 65 percent seat belt usage rate, the highest rate in the nation.
- The Bicycle Transportation Improvement Program initiated independent bicycle projects totalling \$750,000.
- Passage of the Continuing Funding Program for Aviation by the 1987 General Assembly ties the amount of State Aid to Airports to the estimated annual tax payments of aviation users.
- Recognizing that the growth associated with our cities spreads far beyond municipal boundaries, multi-modal transportation solutions are being planned on a regional basis.
- In 1988, the General Assembly allowed the department to increase its role in railroad preservation by allowing department ownership of railroads. As a result, the rail line that served five communities and four counties in the mountains of western North Carolina was purchased and saved from abandonment.



# DIVISION OF HIGHWAYS

North Carolina is undergoing rapid social change as its citizens acquire new habits and lifestyles, and the automobile is in the vanguard of those changes.

More and more people are calling North Carolina home, and the number of motor vehicles on Tar Heel roads is growing at a pace even faster than the state's population growth. Furthermore, our citizens are becoming older and wealthier, and have more leisure time. More and more frequently, they are spending that leisure time in their motor vehicles taking longer trips.

More households now have two or more adults, each of whom is likely to commute, often independently, to work or to school. Workers increasingly are traveling farther to better jobs. As cities become decentralized, those workers often battle rural, suburban traffic jams as fierce as those they face in inner cities.

The increasing demands on our roads -- demands that have found many highways crowded with more vehicles than they can accommodate safely -- come at a time of decreasing federal allocations and a "flattening" of user-fee revenues. At the same time, rising right of way and construction costs have created additional challenges for transportation planners.

In light of these revenue constraints, the Division of Highways and the Board of Transportation have developed a highway program in the Transportation Improvement Program (TIP) that balances revenues against a reliable agenda for right of way acquisition and construction of highways, bridges and other improvements.

Through realistic funding projections and improved preliminary cost estimates, the TIP has become a dependable document. During the past biennium, almost 94 percent of all interstate, rural, urban and bridge projects were delivered as scheduled in the TIP. This compares to approximately 50 percent in the previous biennium and to 63 and 41 percent,



respectively, in the two bienniums before that.

The Highway Division's efforts were assisted by the General Assembly in 1987, which adopted right of way protection legislation as part of Governor Martin's "Roads to the Future" program. This new law made local governments partners in helping to control right of way cost increases.

Also in 1987, a Strategic Highway Corridor Network for North Carolina was identified by the Board of Transportation. This network consists of highways across the state that have been given priority for improvements because of their importance to regions and to the entire state -- highways with high traffic volumes and great potential to promote economic development.

Some of these roads are interstate highways, some are U.S. primary highways and some carry N.C. designations. They all have the common purpose of keeping North Carolina moving safely and growing economically.

Interstate 40 is representative of the department's emphasis on constructing strategic corridors. Stretching from the mountains to

the coast, I-40, when completed, will provide four-lane access to Wilmington, connecting the state's largest port to other important urban areas in North Carolina and beyond our boundaries.

During the past biennium, approximately \$56.4 million was spent for grading, paving and bridge construction on the 120-mile section of I-40 that will connect Wilmington to Raleigh by the summer of 1990. Another 21.8 miles of I-40 between I-85 at Hillsborough and the Research Triangle Park was opened -- ahead of schedule -- in November 1988. Contracts will be let during this fiscal year, thanks to the allocation of more than \$114 million in federal interstate discretionary funds, for the long-awaited I-40 Bypass of Winston-Salem.

I-40 isn't the only strategic corridor to receive attention during the past biennium. For example, work continued on US-264 between Wilson and Washington, N.C., with 31.4 miles of the project opened to traffic during the past two years, and \$9 million in contracts has been awarded to complete the remaining 9.9 miles.



Also under way are projects to relocate US-74 in Polk and Rutherford counties, and on US-74 in Columbus County. Improvements are being made to NC-280 in Henderson County and to US-23/441 in Jackson County, and work is under way on US-321 in Gaston and Catawba counties, just to name a few of the projects undertaken during the past two years.

In all, during the biennium, \$206.1 million was awarded for work on 39 interstate projects, \$127.5 million was allocated for 36 primary projects and \$56.9 million was spent on 17 urban projects.

A total of \$65.5 million was awarded for 66 bridge replacement projects, not including bridges on interstate highways. The construction of a new Albemarle Sound Bridge on NC-32 between Chowan and Washington counties is almost completed, and a new bridge over Bogue Sound now connects Morehead City and Atlantic Beach in Carteret County.

Also, more than \$110 million in state funds was distributed to 468 municipalities from "Powell Bill" funds, which were generated by 1.75 cents per gallon from the state motor fuels tax. The municipalities used these funds to improve roads within their boundaries that are not part of the state system. That same amount -- \$110 million -- also was spent on paving, stabilizing and leveling sections of North Carolina's secondary roads.

In all, highway construction accounted for more than 44 percent of highway fund outlays during the past two years, while almost 28 percent of the fund was used for highway maintenance work. To fund the highway program, revenues totalling \$2.3 billion were allocated to the State Highway Fund during the biennium. Most of this money came from

the Federal-aid program, state gas tax revenues and vehicle registration and drivers' license fees.

During this period, however, it became increasingly apparent that the federal government's role in answering North Carolina's highway construction challenges is diminishing.

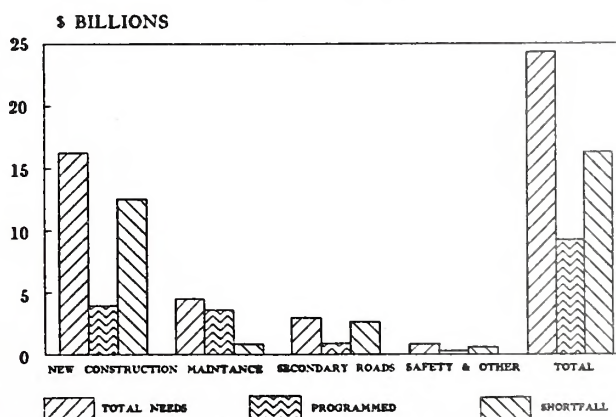
Since 1956, for every dollar in federal fuel taxes collected in North Carolina, only 83 cents have been returned to the state. In this past biennium, the proportion returned was 82 percent as the result of spending limitations imposed as a budget-balancing tactic by the U.S. Congress.

Realizing that the federal role in improving North Carolina's highway system is on the decline, the General Assembly in 1987 established a Highway Study Commission to study all highway construction needs and to propose a method for funding those needs to the 1989 General Assembly.

Working with the Highway Study Commission, NCDOT has estimated the total highway construction and maintenance needs to the year 2000 at \$24 billion. The current level of funding, however, will only meet about \$8 billion of those needs, leaving \$16 billion of needs unmet.

These unmet highway construction needs, and the method of funding them, represent the major highway construction challenge that must be addressed during the 1989-90 biennium. North Carolina is on the move as far as vehicular traffic is concerned, and it is moving toward solving its vital highway construction backlog as well. While cost-saving programs help to make the most of North Carolina's highway dollars, we must provide adequate revenues to meet our highway construction needs if we are to maintain our reputation as the "Good Roads State."

#### SUMMARY OF HIGHWAY NEEDS TO THE YEAR 2000





# AVIATION

North Carolina's aviation activities continued to increase at a steady rate during 1987 and 1988. These activities involved all facets of aviation within the state: commercial airlines, general aviation and military.

## COMMERCIAL AIRLINES

North Carolina received its second major international airline hub when American Airlines opened its East Coast hub at the Raleigh-Durham Airport in May 1987. This hub currently serves more than 50 cities, and includes Latin American service to San Juan, Cancun, Cozumel and European service to Paris. In addition, Piedmont Airlines continues to build its main hub at Charlotte and added its own international services in 1987 with non-stop flights to London and Nassau. With the development of these two hub airports, North Carolina has access to domestic and international airline services that can help the state attract quality industrial development.

## GENERAL AVIATION

State programs assisted in the development of four new general aviation airports, three of which are open. The new Person County Airport at Roxboro, a reliever airport for Raleigh-Durham, was opened in 1987, and the new Elizabethtown Municipal and Siler City Municipal airports opened in 1988. Each of these airports has a 5,000-foot paved and lighted main runway with instrument approach capability. In addition, the final grants of state and federal funds were received to complete the new Wilkes County Airport, a replacement for the inadequate airport in Wilkesboro. The new airport, which should be open by mid-1989, will have a 5,500-foot paved and lighted runway and instrument approach capability.



In 1987, the Department began the update of the North Carolina Airport System Plan. The current plan was completed in 1979 and has guided the department and local governments in their efforts to meet the statewide needs of airports and aviation support systems. However, the changes in operating economics and patterns of local development make it desirable to update the system plan. The first elements of the plan to be completed included land-use inventories and airport obstruction analyses, which will be used by local governments to provide suitable land-use controls and to remove hazardous conditions. Changes to the State Aid to Airports Program reflect the needs of the state's airport system and the increasing emphasis placed on the system by the state. For Fiscal Years 1987-88 and 1988-89, a total of \$8.5 million in state funds was appropriated for State Aid to Airports and partial funding of state aviation programs. This represents an increase of about 20 per cent over the previous biennium.

The main reason for this increase was the passage of the Continuing Funding Program for aviation by the 1987 General Assembly.

This program ties the amount of State Aid to Airports to the estimated annual tax payments of aviation users. It is expected that significantly higher funding levels will result from this program.

Increased state funding is very important to the smaller airports because recent changes to federal airport funding have de-emphasized federal assistance to small communities. A strict interpretation of revised federal funding policies indicates that about half of North Carolina's general aviation airports will not have the priority necessary to compete for federal funding. For the other half, limited amounts of federal funds will probably fund less than 10 per cent of the annual requests. Under these conditions, state and local funds will take on added importance.

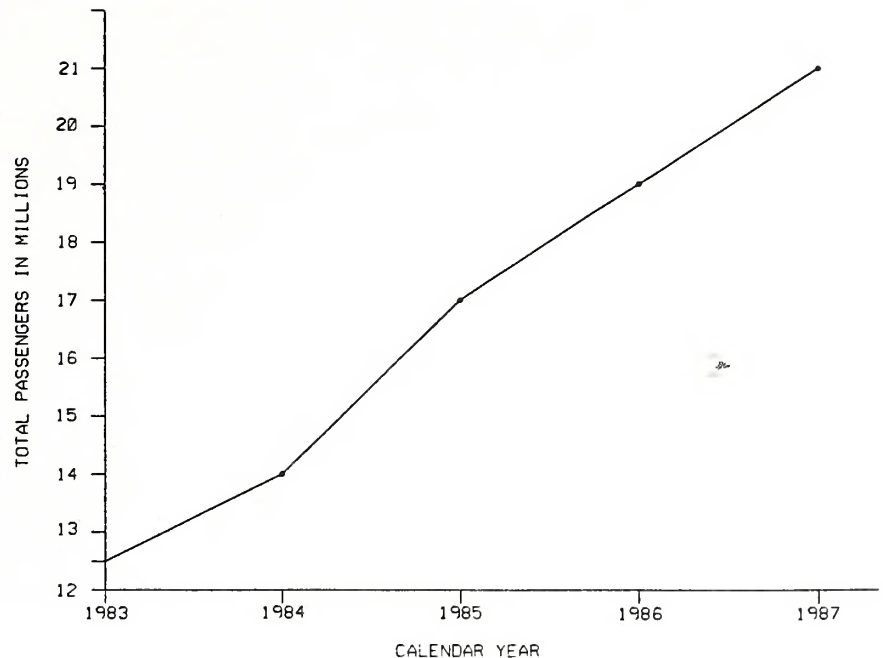
Of interest to all aviation users was the decision of the 1987 General Assembly to establish a Study Commission on Tall Towers to determine the possible state role in lessening the effects of tall structures on the aviation environment. The 1989 General Assembly is expected to consider legislation to implement recommendations of the commission when they are completed.

## MILITARY AVIATION

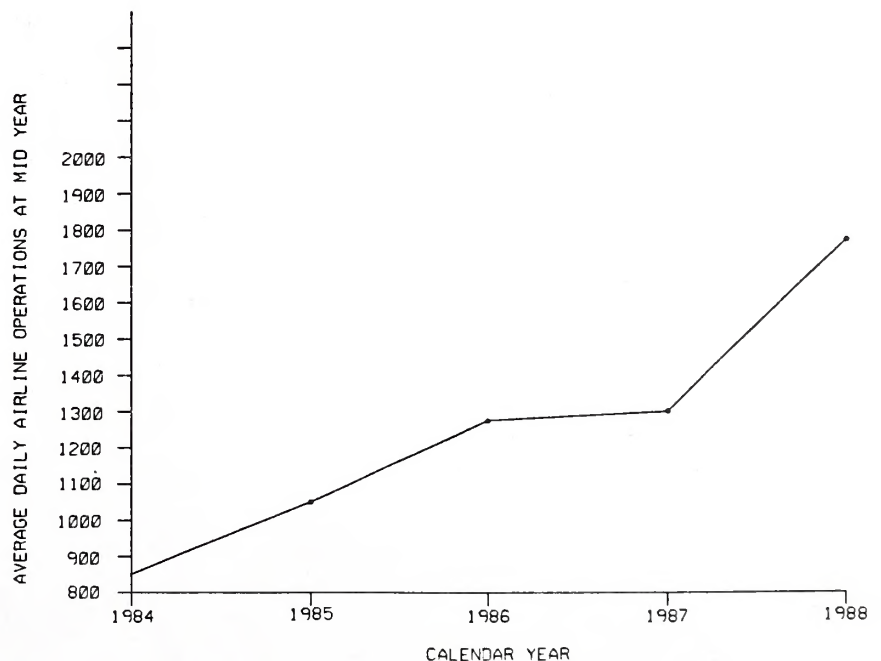
In the area of military aviation activities, North Carolina continues to occupy a strategic position in the nation's armed forces. While military aviation is important to North Carolina's civilian employment and economy, it also has the potential for adversely affecting aviation, local citizens, agriculture, fisheries and economic development. Significant special use airspace expansions and modifications have been requested or planned by the military services. These changes involve many thousands of square miles of airspace. The department is working with the North Carolina Department of Natural Resources and Community Development on various proposals.

The department recognizes that modern business and industry demand adequate air access for economic development purposes. Just a glance at surrounding states indicates that all are committed to the continual upgrading of airports and airways to help attract quality jobs and development. Tennessee and Virginia each now have state aid programs that will exceed \$10 million annually and the communities receiving that aid are the main competitors North Carolina's smaller communities. The department is committed to maintaining North Carolina's economic competitiveness through a partnership with local governments, the Federal Aviation Administration and private users to build the best possible system of airports, airways and air service to meet the long-term needs of our state.

NORTH CAROLINA AIRLINE PASSENGERS



NORTH CAROLINA AIRLINE FLIGHTS





# BICYCLES

North Carolina can boast of having the oldest state bicycle program in the nation. As a result, it often has been viewed as a model for its comprehensive approach and innovative programs.

In addition to assisting race organizers and distributing its award-winning bicycle route maps to tourists, the program works closely with the North Carolina Bicycle Committee. Through the efforts of the program and the committee, many of the state's varied bicycle needs have been met.

During this biennium, the program continued its many bicycle services to the public as well as its technical assistance to local governments.

Bicycle safety on the state's streets and highways is and will be the top priority of the program.

Bicycles are becoming an important factor in the design of our highways. This takes two forms -- independent and incidental highway improvements. Independent projects are planned, funded and built separately with federal funds. Incidental improvements are incorporated into other highway construction work and accomplished with a combination of federal and state funds.

The major addition to the program during this biennium was the Bicycle Transportation Improvement Program that initiated independent bicycle projects totalling \$750,000. In addition, more than 20 highway projects were started with bicycle improvements as incidental features. This ongoing bicycle construction program has added a new dimension to the department as well as to the safety of the state's bicyclists and motorists.





# RAILROADS

Railroads handle bulky, heavy freight that would otherwise move on our state highways. The availability of economical rail service is what sometimes attracts new businesses and jobs to many communities.

Our state's utility, agricultural, forestry and mining industries are some of the biggest users of rail freight services. Because of the importance of rail to many of the state's basic industries, North Carolina actively supports an economical and efficient rail system.

Norfolk Southern Corporation and the CSX Corporation, two of the nation's major railroads, control more than 94 per cent of the rail network operated in the state. In 1986, Norfolk Southern Corporation controlled 1,908 rail miles while CSX Corporation controlled 1,284 rail miles. The remaining 185 rail miles were operated by small independent railroad operators. Many of these smaller

firms have been in business for 100 years and are important to the local economies they serve.

Although railroads serve North Carolina's economy well, our rail system has been shrinking at an alarming rate. Since 1978, both Norfolk Southern and CSX have initiated programs to streamline their networks and to abandon unprofitable track.

During the biennium, both major rail companies abandoned 48 rail miles. Also, plans have been announced by Norfolk Southern and CSX to abandon another 119 miles. During the past 10 years, more than 589 miles of track have been abandoned in North Carolina, averaging 58 rail miles per year.

Rail service abandonments have affected 46 counties and more than 140 shippers since 1978. The adverse economic effects are estimated to be substantial and do not include the effects on our

state's highway as a result of the diversion of rail traffic to trucks.

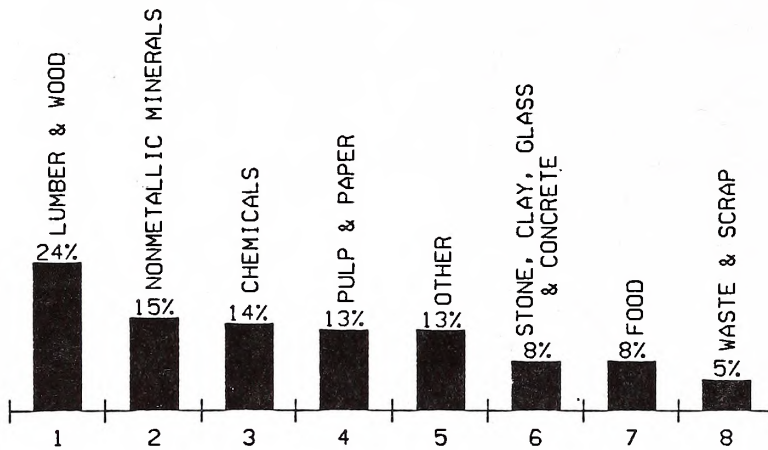
Recognizing the problems that can result from railroad abandonment, the General Assembly has authorized the department to use state funds to help local governments, railroads and shippers preserve critically needed rail service. Until recent years, the department primarily used state resources to match federal funds provided to North Carolina for rail revitalization. These federal funds, however, have become scarce.

State funds typically are used to help shippers or community organizations purchase or rehabilitate local rail lines where costs are prohibitive. In this biennium, rail program funds were allocated for two railroad rehabilitation projects. The five-mile Dunn/Erwin line serving principal shipper Erwin Mills (formerly Burlington Industries) was purchased by the Aberdeen and Rockfish

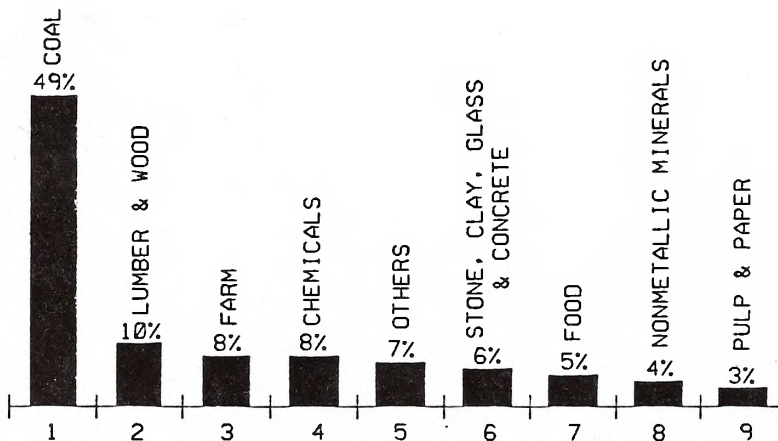




MAJOR COMMODITIES SHIPPED BY RAIL IN N.C.  
1986



MAJOR COMMODITIES RECEIVED BY RAIL CUSTOMERS IN N.C.  
1986



Railroad (A&R) to avoid a scheduled abandonment. The line was badly deteriorated and is being repaired with state rail funds and money provided by the A&R and Erwin Mills. Burlington employs 1,375 and contributes 60 per cent of the taxes that support the town of Erwin.

The 19-mile Spring Hope-Rocky Mount line serves a variety of shippers including Masonite, Union Camp, Louisiana Pacific and Spring Hope Rockwool Company. The line was proposed for

abandonment by CSX and subsequently sold to the Laurinburg and Southern Railroad. The state is assisting in a major repair program. In 1987, a wood yard relocated along the line and began shipping. By 1989, a major new grain feed facility operated by Perdue Company will come on line. New jobs created by the addition of these industries to Nash County are estimated at 45 people at the plants and another 170 at contract farms.

Two other ongoing rehabilitation

projects will be completed by the end of 1988. These include repairs to the 12-mile Red Springs-Parkton line proposed for abandonment by CSX in 1984 and later purchased by a regional economic group. A similar but more intensive effort has involved upgrading of the 34-mile Aberdeen-Star track proposed for abandonment by Norfolk Southern in 1984 and subsequently sold to a private operator. In 1987, a new large feed facility was completed and the company began receiving rail shipments. The new plant will employ 70 on-site personnel, an additional 400 new workers at a chicken processing plant and 170 farm producers.

In 1988, the General Assembly permitted the department to increase its role in railroad preservation by authorizing department ownership of railroads. As a result, the department purchased 66 miles of railroad serving five communities and four counties in the mountains of western North Carolina. The railroad has been leased to the Great Smoky Mountains Railway, which will continue freight operations and operate excursion and dinner trains. Passenger trains will complement and enhance tourism in the region.

During the past five years, the department's rail program has assisted in preserving railroad service on seven branch lines totaling 149 rail miles, retaining needed rail service to 11 counties and 22 communities. To date, federal and state investments to preserve rail service has amounted to \$3.9 million. Community, shipper and railroad investments have totaled \$2.7 million. The benefits from rail program investments have included the addition of 694 new jobs and the avoidance of 425 job losses. Total net benefits resulting from rail program investments are estimated at \$30 million.

While much of the visible product of rail program efforts are rail projects, other functions include serving as a clearing house for railroad issues and providing technical assistance to communities.



# PUBLIC TRANSPORTATION

North Carolina's growth and development have increased its need for a variety of public transportation services. DOT's Public Transportation Division assists both public and private transportation concerns throughout the state to help meet these needs.

Since 1987, the establishment of a dedicated account for public transportation funding has enabled multi-year programming for a wide range of public transportation projects. The division secures federal funding for North Carolina, and provides state matching funds to municipalities and other eligible recipients for planning activities, capital needs and demonstrations.

During this biennium, the division began to offer training and technical assistance to transit systems across the state. The division also provided substantial assistance to the Wilson Transportation Center, which will combine Wilson's city bus system, Greyhound, Trailways and taxi services "under one roof." This approach will be used in other localities across North Carolina if the concept proves to be as successful as expected.

Five types of services receive the division's assistance: urban transit, regional public transportation, rural public transportation, intercity ground transportation and ridesharing programs.

The urban transit systems consist of 16 city bus systems -- 14 publicly operated systems and two operated privately by Duke Power Company. During FY 86-87, ridership totalled 25.4 million, or about the same as was carried in the previous year. In FY 87-88, city buses carried more than 26.9 million people, an increase of 5.9 per cent.

Recognizing that the growth associated with our cities spreads far beyond municipal boundaries, multi-modal transportation solutions are being planned regional-

ly. Creating a new, single-purpose regional public transportation authority that can provide public transportation for a number of jurisdictions has received a great deal of study and attention, particularly in Wake, Durham and Orange counties. Regional public transportation projects focus on increasing ridesharing opportunities, such as carpool and van-pool matching services, regional commuter bus services and High Occupancy Vehicle (HOV) lanes.

Organized ridesharing programs began in the late 1970s. They make it easier for commuters to get to work during the peak periods of traffic congestion and help relieve congestion through carpool matching and van leasing services. Many workers across the state saved hundreds of dollars during this biennium by commuting in a ridesharing van.

In urban areas, public transportation provides citizens with an efficient, affordable way to travel. In rural areas, vans often replace the large buses found in cities, but the role of public transportation is very similar.

If anything, rural public transportation may be more vital because of the greater distances involved, and because of the remoteness of areas where many people live. Special emphasis is given to the transportation problems of the elderly, the handicapped and low-income citizens in rural areas.

The Public Transportation Division also focuses on intercity public transportation. A number of Trailways routes in rural southeastern North Carolina are partially supported by state assistance. During the previous biennium, Amtrak train service also was part of the program.

"Carolinian" rail service was inaugurated on October 29, 1984, and ran for 10 months between Raleigh and Charlotte, carrying a total of 117,000 riders. The Governor's Rail Passenger Task Force is studying the possibility of

reviving this service. The Task Force also is studying ways to protect important rail rights of way and the feasibility of high-speed rail service in North Carolina's future.

In looking toward the transportation needs of the next century, public transportation planners are beginning to consider the potential for people movers and light rail, and are exploring in greater depth the relationship of land use and transportation.





# GOVERNOR'S HIGHWAY SAFETY PROGRAM

During the past biennium, the Governor's Highway Safety program has concentrated on developing programs to address highway safety issues involving alcohol, traffic records, emergency medical service, occupant restraints, police traffic services, motorcycles, bicycles and safety construction and operational improvements.

## ALCOHOL

Alcohol consumption is a factor in about 13 percent of injury crashes and 27 percent of fatal crashes. During the past two years, the prime alcohol counter-measure activities undertaken by the GHSP have been in the area of enforcement. Alcohol traffic enforcement projects were conducted in 12 sites across the state. These programs also provided public information and education on the driving-while-impaired problem.

A study by the UNC Highway Safety Research Center is evaluating the effects of North Carolina's Safe Roads Act. Results so far show that the rate of alcohol-related and nighttime crashes has leveled off. For those under age 18, alcohol involvement in crashes has decreased by 47 percent and alcohol involvement has decreased by 36 percent for accidents in the 19-20 age group. The conviction rate for drivers arrested with a blood alcohol content of .10 or above is 91 percent, compared to only 71 percent before the Safe Roads Act.

The GHSP has helped raise public awareness of North Carolina's anti-DWI efforts through a statewide campaign using radio, television and outdoor advertising. This project supplements and reinforces other efforts in the state.

## TRAFFIC RECORDS

The major activity in traffic records was the development and expansion of the MERGE system. This system, originally developed

for use by DOT engineers, was extended to the local level in FY 1986 and FY 1987. The long-range goal of this effort is to provide North Carolina police and traffic engineering departments with a computer system that automatically merges data on accidents, roadway features and roadway characteristics. This system is being used in Winston-Salem, Wilmington, Durham, High Point and Chapel Hill to analyze relationships between roadway characteristics and accidents. It is also beginning to provide the information to help select highway improvements, and later will be used to evaluate these improvements.

## EMERGENCY MEDICAL SERVICE

Trauma injuries are the fourth leading cause of death for all ages, and first among those under age 44. In response to the need for a statewide trauma

registry, two projects were developed with the N. C. Department of Human Resources' Office of Emergency Medical Services in cooperation with the state's existing trauma centers and the North Carolina Committee on Trauma. These projects are designed to collect standardized and sophisticated data on trauma. A trauma registry would also provide a basis for discussion among the state trauma centers and various health and injury prevention programs to improve trauma care.

## OCCUPANT RESTRAINTS

One of the most significant statewide accomplishment in highway safety was the implementation of the mandatory Seat Belt Law on Oct. 1, 1985. During this biennium, the objective of the occupant restraint program of the GHSP was to increase public awareness of the new law and of the benefits of wearing seat belts.





This objective was carried out by holding workshops, distributing materials and providing funds to government organizations to conduct seat belt awareness campaigns.

In 1987, North Carolina received the National Safety Council's top award for having a 65 percent seat belt usage rate, the highest rate in the nation.

## POLICE TRAFFIC SERVICES

In the area of police traffic enforcement, the major emphasis has been on speed control and police training. Two projects conducted with the Durham Police Department and the New Hanover County Sheriff's Department established special teams of officers to emphasize enforcement of speed and DWI laws. The teams have also been responsible for conducting DWI public awareness programs.

In FY 1986, two projects conducted by the GHSP provided management training for 45 High-

way Patrol officers and new traffic law updates for 500 police officers.

## MOTORCYCLES

The GHSP has funded projects at East Carolina University for the past two years to address the growing problem of motorcycle crashes. In 1986, a study was conducted to determine the extent of the problem and to explore possible countermeasures. As a result of the study, a Rider Education Program was begun statewide through the community college system.

## BICYCLES

More than two million North Carolinians ride bicycles each year and our state has one of the highest bicycle accident rates in the nation. Over half of the bicycle accidents involve children who have had no formal safety training. Last year, the GHSP funded the 4-H Complete Bicycle Education Project. Volunteer

teams reached young people in 20 counties.

## SAFETY CONSTRUCTION AND OPERATIONAL IMPROVEMENT

The objective of projects in this area is to reduce the potential for traffic accidents through the application of modern traffic engineering to all state roadways. The DOT worked with the Federal Highway Administration to present a three-day information workshop on Work Zone Traffic Control to all inexperienced personnel in the Traffic Control Unit of the Traffic Engineering Branch of the DOT.

Thirteen county road signing projects were begun. Roadway signs have been or will be erected at all intersections in these counties to aid emergency personnel who respond to calls and to collect data on accidents.





# DIVISION OF MOTOR VEHICLES

As fast as North Carolina's population grows, the number of motor vehicles increases even faster, and that means a heavier workload for the Division of Motor Vehicles.

The division now oversees more than 5 million driver license records, 5.5 million vehicle registrations and the operation of 190 driver license offices and 13 truck weigh stations.

Also, the division is responsible for licensing about 7,500 vehicle safety inspection stations and more than 10,000 automobile and truck dealers, and for regulating about 55,000 commercial vehicles.

In recent years, the number of new drivers licensed each year has increased by more than 150,000, pushing to more than 1.75 million the number of people served annually by the Driver License Section.

Despite these staggering statistics, DMV, with innovative management and dedicated workers, has improved its service to the public. For example, it was able during the biennium to reduce the waiting time for issuance of vehicle titles from 14

weeks to about 10 days. A major innovation that helped produce this dramatic decline in waiting time was the computerization of the state's 128 vehicle registration offices.

During the biennium, Governor Martin appointed a 30-member task force to take the first in-depth look in history at the driver license system and to recommend changes and improvements.

The study, completed toward the end of the biennium, recommended sweeping changes, some of which the governor endorsed. Some, such as express renewal offices for drivers who do not require retesting, were implemented after the fiscal year that marked the end of the biennium. Some recommended changes, such as a six-year license period for safe drivers, would require legislative approval.

Other improvements in DMV's Driver License Section included the establishment in mid-1988 of a Driver Assistance Branch, a revised telephone system to handle the more than 2,000 daily telephone inquiries at DMV and a two-tiered hearing system with strict new standards to process

license restoration applications by repeat DWI offenders.

The Enforcement Section, like the Driver License Section, had its share of innovations during the biennium. While the number of vehicles weighed annually by the section increased from 6.5 million to 9.3 million at the state's 13 weigh stations, penalties quadrupled -- from \$2 million to more than \$8.6 million -- during this period.

In 1987, the Enforcement Section had 11,625 stolen vehicles recovered or cleared from theft reports. That represented a recovery rate of 79 percent -- 17 percent above the national average.

A major responsibility of the section is the administration and enforcement of the Federal Motor Carrier Safety Act. Since 1984, when DMV was given this responsibility, truck safety inspections have increased to about 60,000 each year. In 1987, DMV began a terminal audit program for improved enforcement of truck safety rules. A total of 92 terminal audits have been conducted since that time, and penalties in excess of \$116,000 have been as-





sessed by the State Attorney General's office for violations detected by those audits.

In 1988, North Carolina became one of the first states to equip its enforcement officers with "alco-sensors" to screen truck drivers for alcohol use while on duty. Officers have the authority to prevent truck drivers from driving for 24 hours if a driver's blood alcohol concentration tests at .04 percent. The screening program, which is used at truck weigh stations, has been credited with helping to reduce alcohol use by commercial drivers.

The Vehicle Registration Section was a beehive of activity during the biennium. In 1987, the section processed 7.5 million registration transactions, 6 million of which were handled by the section's 128 contract license plate agencies -- the private business firms under contract to DMV. As mentioned previously, linking these agencies via a computer network helped to produce the quicker turn-around time. In addition, the computer network, projected at a cost of \$3.2 million, was put into operation for about \$1 million less than the projection.

The Vehicle Registration Section administers and enforces the state's Financial Responsibility Act, which requires motorists to maintain continuous liability insurance coverage on their vehicles. In 1987, DMV processed more than 1.4 million liability insurance terminations, mailed about 650,000 recertification letters and relicensed about 55,000 motorists by written notice. The Insurance Hearings Branch held more than 18,000 hearings, revoked 326,000 vehicle license plates and collected \$2.2 million in civil penalties.

Of special significance during the biennium were programs that DMV developed to comply with items on the consensus agenda of the National Governors Association's Working Group on Motor Carrier Procedures. Many of the steps promoting increased efficiency of the motor carrier taxation and registration proce-

dures have been centered in DMV's International Registration Plan Section, a service unit designed for the collection and apportionment of motor carrier fees.

Also noteworthy was the work performed by DMV's Collision Reports and General Services Section, whose Fatal Accident Reporting System was rated best in the nation by the National Highway Traffic Safety Administration.

Finally, two other innovations at DMV should be noted. The division successfully complied with the U.S. Department of Labor's mandate to train and to certify an all-adult force of school bus drivers. Also, DMV for the first time developed a long-range capital improvement program for the renovation and expansion of existing buildings, and the construction of new buildings, handicapped facilities and customer parking and driver license testing areas.



# COMPARATIVE STATEMENT OF RECEIPTS AND EXPENDITURES

(Thousands)

| CURRENT FUND                                    | June 30, 1987 | June 30, 1988 |
|---|---------------|---------------|
| Beginning Fund Balance                          | 890,857       | 1,024,937     |
| Revenue and Receipts                            |               |               |
| Gasoline Tax and Gasoline Inspection            | 603,130       | 607,751       |
| Fees, Licenses and Fines                        | 199,465       | 253,020       |
| Federal Funds-Federal Highway Administration    | 330,854       | 301,445       |
| Federal Funds-Governor's Highway Safety Program | 2,915         | 2,950         |
| Local Funds                                     | 11,083        | 13,694        |
| Property Owners                                 | 3,586         | 5,114         |
| Federal Grants                                  | 6,380         | 7,327         |
| Bond Fund Debt Service                          | 19,693        |               |
| Investment Income                               | 26,194        | 33,925        |
| Miscellaneous Income                            | 1,055         | 1,912         |
| Total Revenue and Receipts                      | 1,204,355     | 1,227,138     |
| TOTAL FUNDS AVAILABLE                           | 2,095,212     | 2,252,075     |
| Net Expenditures                                |               |               |
| Administration                                  |               |               |
| Transportation                                  | 20,237        | 22,606        |
| Division of Motor Vehicles                      | 55,565        | 61,609        |
| Division of Highways                            | 26,873        | 28,716        |
| Maintenance                                     |               |               |
| Primary   | 70,844        | 76,146        |
| Secondary                                       | 123,340       | 131,749       |
| Urban   | 20,116        | 23,565        |
| Contract Resurfacing                            | 70,666        | 99,200        |
| Ferry Operations                                | 13,241        | 13,039        |
| Construction                                    |               |               |
| Primary   | 7,618         | 16,437        |
| Secondary                                       | 47,582        | 85,806        |
| Urban   | 19,312        | 33,824        |
| Access & Public Service Roads                   | 2,010         | 2,236         |
| Bridge Replacement                              | 345           | 631           |
| Spot Safety Improvements                        |               | 3,478         |
| Highway Planning and Research                   | 6,710         | 5,656         |
| Federal Aid                                     | 374,518       | 391,209       |
| Capital Improvements                            | 2,776         | 8,992         |
| Aid to Municipalities                           | 54,703        | 63,716        |
| Other Modes of Transportation                   |               |               |
| Airport   | 3,849         | 4,047         |
| Railroads                                       | 145           | 903           |
| Public Transportation                           | 5,153         | 6,801         |
| Other Programs                                  | 3,124         | 3,527         |
| Debt Service                                    | 32,454        | 37,955        |
| Total Expenditures                              | 961,181       | 1,121,848     |
| EXCESS OF REVENUES OVER (UNDER) EXPENDITURES    | 243,174       | 105,290       |
| Fund /transfers                                 |               |               |
| From General Fund                               | 6,145         | 5,145         |
| To Other Agencies                               | (95,546)      | (78,971)      |
| To General Fund                                 | (19,693)      |               |
|   | (109,094)     | (73,826)      |
| ENDING FUND BALANCE                             | 1,024,937     | 1,056,401     |



# COMPARATIVE STATEMENT OF RECEIPTS AND EXPENDITURES

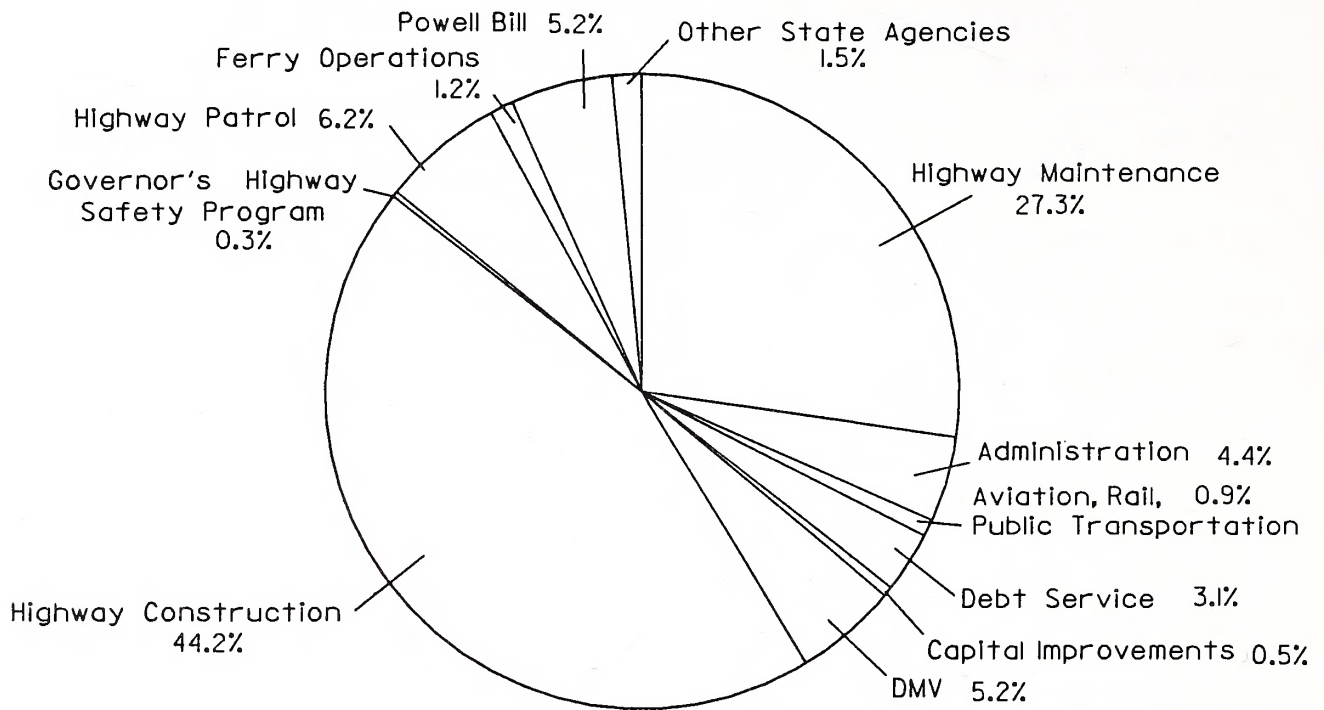
1977 STATE HIGHWAY BOND FUND

| CURRENT FUND                       | (Thousands)   |               |
|------------------------------------|---------------|---------------|
|                                    | JUNE 30, 1987 | JUNE 30, 1988 |
| Beginning Fund Balance             | \$2,567       | \$2,071       |
| Revenue and Receipts               |               |               |
| Local Funds                        | \$152         | (\$283)       |
| Total Revenue and Receipts         | \$152         | (\$283)       |
| Total Funds Available Over (Under) | \$2,719       | \$1,788       |
| Net Expenditures                   |               |               |
| Construction                       |               |               |
| Primary                            | \$4           | \$937         |
| Secondary                          | \$163         | \$90          |
| Urban                              | \$481         | \$238         |
| Total Expenditures                 | \$648         | \$1,265       |
| Ending Fund Balance Over (Under)   | \$2,071       | \$523         |



## DEPARTMENT OF TRANSPORTATION EXPENDITURES 86 - 88 BIENNIUM

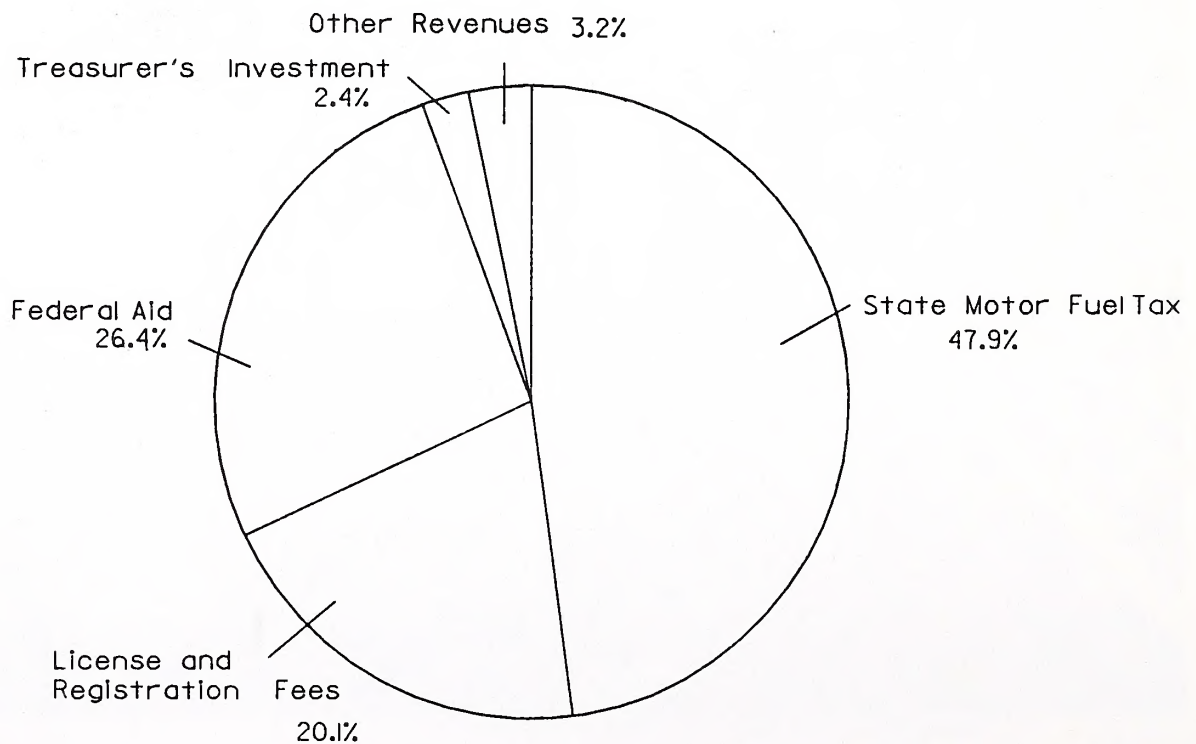
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Total Expenditures - 2,257,545,167.46

## DEPARTMENT OF TRANSPORTATION REVENUES 86 - 88 BIENNIUM

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Total Revenues - 2,442,782,256.52



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